Sectt. II-27—104,006—4-11-49.

P.W. (195) Department

Cordy SERIES.

G.O. NO. Ms. 486

486

Dated 3 2-1957

Closed
for
P.W.
7/2/57.

[Despatch Abstract.]

Contracts. Highways Deptt - Bridge over the Swarnamukhi at Puttigai in the S. Arcot Dt. Negotiated tenders of M/s. P. Ramaswamy & Co
Approved.

From:
Sri M.S.Thirumale Iyengar,
B.E., I.S.E.,
Chief Engineer (Highways)
Chepauk, Madras 5.

To:
The Secretary to Government,
Public Works Department,
Fort St. George,
Madras.

Letter No.56665-D2/50-2 dated 18.12.50.

Sub: Contracts - Highways Department - South Kanara District . Constructing a bridge over Swarnanadhi near Puttige - Tenders.

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I forward herewith a copy of letter Roc.No.P3.1396/50 dated 11.11.50 from the Superintending Engineer(H) IV Circle and its enclosures in original. In the circumstances stated therein, the lowest tender of M/S.P.Ramaswamy & Co. at 44.91% above estimate rate using precast cement concrete blocks all round with mass concrete 1:4:8 in the centre in lieu of the coursed rubble masonry for the piers and abutments is recommended for approval.

P. R. Ramchandra 18.12.50

for Chief Engineer(Highways)

Encl: 1. Copy of Suptg.Engineer's letter dt.11.11.50 and its enclosures.
2. Tender papers as received from the Suptg.Engr. in original . (118 pages)

AVP/19.12.50

**

Copy of letter No.Roc.No.P-3-1396/50 dated 11-11-50 from The Superintending Engineer (Highways) Fourth Circle, Coimbatore to the Chief Engineer (Highways) Chepauk, Madras.

**

Sub: Contracts - South Kanara District - Constructing a bridge across Swarnanadhi near Puttige at mile 13/1 of Haridaka Hebri Road - Estimate for Rs.4,00,000/- C.E.(H) No.56/49-50 Tenders - Regarding.

Ref: Chief Engineer's(H) memo No.33781/D2/50-HR. dt.14.7.50.

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Tenders for the above work were called for thrice on 19-6-50 30-8-50 and 25-10-50. In response to the first call only one tender from M/S.Gammon Dunkerly and Co., (Madras) Ltd., was received at 67-91% above estimate rates which was rejected by me (vide C.E.(H) Memo quoted above).

During the second call two tenders were received (1) from Sri K.S.Chandrasekharan and 54.32% above estimate rates and (2) from Sri T.R.Viswanathan at 61-04% above estimate rates, which were also rejected me as the rate quoted by them were high and unacceptable.

In response to the call of tenders for the third time i.e. on 25.10.50 three tenders were received from the following contractors and their tendered rates are as given below.

1. M/S.P.Ramaswamy and Co., Coimbatore. 52-47% above estimate rate.
2. Sri T.R.Viswanathan, Thiruchirapally 58.29% -do-
3. M/s.Gammon Dunkerly & Co., Ltd.Madras.65.66% -do-

P.T.O

4 The lowest tenderer M/S.P.Ramaswamy and Co., in their letter dated 30.10.50 have further reduced their rates on negotiation for the items 1,2,3 and 4 in the schedule. They have also quoted alternate rates for piers and abutments (1) using mass concrete ~~blocks~~ 1:4:8 and 1½" I.R.C. metal and (2) using precast cement concrete blocks of 1'-0" x 2'-0" alround and mass concrete 1:4:8 in the centre instead of coursed rubble masonry. The percentage excess over estimate (1) as per departmental design (2) using mass concrete (1:4:8) with precast block facing, before and after getting this rates reduced is compared in the statement (b) enclosed.

	As per the original tender.	% excess after reduction of rates
1. For departmental design.	52.48%	50.22%
2. Using mass concrete (1:4:8) for piers and abutment.	48-98%	46.72%
3. Using concrete (1:4:8) with precast block facing.	47-76%	44.91%

5 M/S.Gammon Dunkerly and Co., (Madras) Ltd., have also submitted alternate rates for piers and abutments built in cement concrete1:4:8 instead of coursed rubble masonry and two alternative designs (1) for simply supported "T" beam of 10 spans of 41'-6" clear.

Alternative design No.I. (7 spans of 60'). The only difference between this design and departmental design is that they have designed the beams as simple supported over each piers instead of continuous over 3 or 4 spans adopted in departmental design. Other details are as per the departmental design.

Alternative design No.II. (10 spans of 41'-6"). In this case they have redesigned the piers and 'T' beams only. All other details are as per the departmental design. As there will be floating timbers in the river, the reduction of spans as suggested by M/s.G.D. & Co., need not be considered and hence not recommended. The above designs are compared in statement(B)

7 M/S.Gammon Limited, Bombay, have also submitted an alternativ design, The bridge superstructure and piers are entirely in Reinforced concrete designed as a series of rigid frames spans with ends fixed in reinforced concrete footings bedded in the rocky river bid and have quoted L.S. amount of Rs.4,53,000/- But this amount does not include the cost of forming approach roads, while the other tenders include this. For the purpose of comparison, in the comparative statement(B) if the estimated value of approach work is deleted from the estimated cost of the bridge if the % excess will work out to only 46.65%. Further the contractor's design is based on I.R.C. class "A" loading double lanes where is the departmental design is for I.R.C. class *"A.A" loading. They have also stipulated certain conditions which the department cannot accept. As the design is not based on I.R.C. class "A.A." loading and as there will be floating timbers in the river, which will be injurious to the R.C. Columns suggested by them for piers, this design is not worth trying and hence not recommended. There will be water always in Half the width of the stream and hence the foundation as proposed by them cannot also be laid properly.

8 All tenders based on departmental design are compared in the statement'A'. The statement'B' shows the amount and percentage excess based on departmental design or for alternative rates for mass concrete piers or for fresh designs submitted by the contractors.

P.T.O

I have also to state that M/S.Bharath Engineering and Construction Co., Udipi was also asked to report the approximate cost of the bridge as per their tender rates, adopting C.C.1:4:8 instead of coursed rubble masonry and cement concrete precast block for facing with reference to their letter No.Nil dated 25.10.50 (copy sent to Chief Engineer(H) direct). The cost as reported by them in their letter dated 2.11.50(copy enclosed) is Rs.5,50,000/- which works out 70.4% above estimate rates.

The tender of M/S.P.Ramaswamy & Co., Coimbatore is the lowest. Of the three alternate proposals submitted by them for the Masonry piers, the one using precast concrete block 1'-0" x 2'-0" all round with mass concrete 1:4:8 in the centre is the chapest.

In this locality it is very difficult to get skilled workman. Using of precast slabs all round will also save lot of form work and if this is adopted the Bridge work may be completed earlier than the schedule time.

I recommend the tender of M/S.P.Ramaswamy & Co., Coimbatore and their design using precast cement concrete Blocks all round with mass concrete 1:4:8 in the centre in lieu of the coursed rubble masonry for the piers and abutments. The tender percentage for the above design worksout to 44.91% above Estimate rates, and is recommended.

The tenders with comparative statements are herewith submitted for early orders.

Sd. xx xx xx

For superintending Engineer(H)

Encl: -6 tenders and one alternate design of M/S.Gammon. Comparative statements A and B with copy of letter of Bharath Engineering Co., and statement of particulars.

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Copy of letter of the Bharath Engineering and Construction Co., Udipi dated 2-11-50 to the Superintending Engineer(H) Fourth Circle, Coimbatore.

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Sub: Construction of proposed bridge across Swarnanadhi near Puttige at 13/1 of Hiriadka Hebri Road.
Ref: Your letter Poc.No.D3-1396/50 dated 30.10.1950.

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We thank you for your letter under reference. We estimate the approximate cost of the Puttige bridge according to our tender rates on your schedule (adopting cement concrete 1:4:8 instead of coursed rubble masonry and cement concrete 1:4:8 blocks for the facing) to be Rs.5,50,000/- (Rupees five lacks and fifty thousand).

Awaiting your orders.

Sd. xx xx xx

U.Srinivas Rau, Engineer Partner.)

/True copy/

7

From
Sri M.S.Thirumale Iyengar, B.E., I.S.E.,
Chief Engineer(Highways)
Chepauk, MADRAS.5

To
The Secretary to Government,
Public Works Department,
Fort St.George, MADRAS.

SECRETARY TO GOVERNMENT
729
1 FEB 1951
PUBLIC

Letter No.56665-D2/50-4 dated 7-2-51

Sir,

Sub: Contracts - Highways Department - bridge over the Swarnanadhi at Puttige in the South Kanara Dt.- negotiated tender of M/s.P.Ramaswami & Co.,-regarding

Ref: G.O.Ms.No.486 P.W. dated 3-2-51

The tender documents returned with the above G.O. have been received.

P.W.D (A)
May be placed with (I)

P.G. Ramchandra
10/2/51

For Chief Engineer(Highways)

9

From
Sri K.K.Nambiar, B.E.,M.I.E.(Ind),
F.Inst.,H.E.(Eng),M.I.Mun.E.(Eng),
M.Am.,Soc.,C.E.,M.R.San.,I.,
Chief Engineer (Highways),
Chepauk, Madras-5.

To
The Secretary to Government,
Public Works Department,
Fort St.George,
Madras-9.

ADJT. GENERAL'S OFFICE
21 MAY 1952
PUBLIC WORKS DEPARTMENT

Letter No.25875-D2/52-1, dated 16-5-52.

Sir,

Sub: Contracts - Highways department - S... Kanara Division - Constructing a bridge near Puttige at mile 13/1 of Hariadka Hebri road.

Ref: G.O.No.486-P.W.D., dt/3-2-51.

The tender of Mr.P.Ramaswamy and Co., approved in the above G.O. for the above work provides for mass concrete for piers and abutments with precast block facing. The Superintending Engineer IV circle, now reports that due to the acute cement position, it has not been found possible to get enough cement for mass concrete and that therefore he has ordered the contractor to proceed with the work adopting C.R. masonry Ist sort in cement mortar 1:4. The Superintending Engineer has also agreed to the rate of Rs.185/- per unit quoted by the contractor which was the lowest rate quoted for such masonry in the original tenders. Adoption of C.R. masonry for piers involves an additional expenditure of Rs.11,280/-, the total cost being Rs.1,04,340/- against the total cost of mass concrete Rs.93,060/-.

As the change is made in the interest of the execution of the work and as the rate of Rs.185/- for C.R. masonry is reasonable, I request that the action of the Superintending Engineer, IV circle, in having ordered the contractor to do C.R. masonry for piers at the rate mentioned above may please be ratified.

104340-
93060
11280

for Chief Engineer (Highways).

cg/17.5.

P.W.D.(A.2)

Memo.No.39975 A/52-2 & 26.6.52.

Sub:- Constracts- Highways Deptt.- South Kanara Dt- Constructing a bridge near Puttigee at M.13/1 of Heriadka Hebri road- Adoption of C.R.Masonry for piers- Approved.

Ref:- G.O.No.Ms.486 P.W. dated 3-2-51
From the C.E.(H) letter No.25875 D.2.52-1 dated 16-5-52

In the circumstances stated by the C.E.(H) in the letter cited, the Govt. approve his proposal to adopt coursed rubble masonry, Ist sort, in cement mortar 1:4 for piers for the bridge works at M.13/1 of the Heriadka Hebri road in South Kanara Dt. at Rs.185/- per unit in lieu of mass concrete with precast block facing provided for in the tenders of the contractors for the work approved in G.O.No.Ms. 486 P.W. dated 3-2-51.

The action of the S.E.(H), IV circle in having ordered the contractors to do coursed rubble masonry for piers at the rate of Rs.185/- per unit in anticipation of approval of the Govt. is ratified as a special case.

To the C.E.(H)
2 copies.
To the A.G., Madras
through Fin.
2 spare copies.

Note:- Subject to approval, the draft memo. above which is based on the recommendation of the C.E.(H) is submitted. After approval, the case may be sent to Fin. for acceptance of the draft. (The addl. expre. involved in adopting C.R. masonry for piers is Rs 11250)

42372
6 JUN 1952
FINANCE DEPARTMENT

Vide Agenda
PWD memo no.
39975/A/52-1
5-7-52

Replies may be noted by Control Section. Details about this shortage may be obtained

2

39975 A/52

A

12

Fin (E.C)

Please see the letter from the C.E. (H) on p 1 ante.

2/. In the circumstances stated, the draft memo. at ante may be accepted. ~~M(Fin) may see~~.

[The additions & corrections involved in adopting C.R memo may be made in Rs 11,280/- Accepted 18/6/52]

Kw 7.6/52 mc 7.6/52

18/6/52 $

Kw 19/6/52 Pw

Fin. W.O. 42372/E.C/52-1 19.6.52

P.W.D (Hrs)

The draft memo. on p. 1 ante may issue.

Kw 20/6/52

Kw 20/6/52

Kw 25/6/52

ADDL. ASST. SECRETARY TO GOVERNMENT 20 JUN 1952 PUBLIC WORKS DEPARTMENT

Gopal Menon 25.6.52

4963?

N. Ramachandra Rao (Hrs) 26.6.

(11) Dw 25/6/52

(Issued as memo No 39975/A/52-28/6/52) bill ante

SECRETARY TO GOVERNMENT 26 JUN 1952 PUBLIC WORKS DEPARTMENT

CM. 6026 M/50

P.W.D (A)

Sub: Communications - S. Kanara Dt. - Construction of a bridge over the Swarnanadhi near Pullige - Tender proposals.

Ref: From the C.E.(H) Letter No. 56665 D_2 · 50-2 dated 18.12.50.

Please see the C.E.'s letter at p. 1 C.

In G.O. Ms. No. 1510 P.W dated 28.4.49 the work of Constructing a bridge over the Swarnanadhi River near Pullige at an estimated Cost of Rs. 4 lakhs was sanctioned. Tenders for the work have been called for thrice ~~for the work~~. The tenders received at the first and second tender calls were rejected by the S.E.(H) as the rates quoted by the tenderers were considered high - vide paras 1 and 2 of his letter at pp 1-3 C. At the third tender call, three tenders have been received. The names of the tenderers, their tendered amounts and the percentage of excess of these amounts over the estimate rates are given below:-

Name of the tenderers	Amount of tender Rs.	Percentage of excess over estimate rates.
1. M/s. P. Ramaswami & Bros. Coimbatore	4,92,248	52.4
2. Sri. M.R. Visvanathan Tiruchirapalli	5,11,050	58.29
3. M/s. Gannon Dunkerley and Co. Ltd. Madras	5,34,168	65.46

Value of items (according to the estimate rates) put to tenders 3,22,845.

The tenders of the three Contractors with the Connected documents will be found at (A)

2 The tender of M/S. P. Ramaswami and Co. is the lowest of the tenders received at the third tender Call. The S.E(H) negotiated with the Contractor and got the tendered rates for certain items reduced. The Company have also quoted alternative rates for piers and abutments using (1) mass Concrete 1:4:8 and 1½" I.R.C. Metal and (2) precast Cement Concrete blocks of 1'-0" x 2'-0" all round and mass Concrete in the Centre instead of Coursed rubble masonry provided in the estimate. The percentage of excess of the tender of the Company on the basis of the alternative rates for abutment and piers over the estimate rates is given at 'K' on p. 2 of. It will be seen that the proposal to use cement Concrete with precast Concrete block facing is the cheapest and the tender percentage of the Company for the above design works out to 44.91 % above the estimate rates.

3 Messrs. Gammon, Dumberley & Co. Ltd. have also quoted alternative rates for abutment and piers. These have been discussed in para E of the S.E's letter at p. 2 of.

4 Messrs. Gammon India Ltd., Bombay, Besides the three tenderers mentioned above have submitted quotations for the bridge based on their own alternative design. For the reason

given in para 6 of his letter ab pr 2 cf. The S.E. considers that this design is not worth trying and does not recommend it.

'M' in p 2 cr

5 All the tenders based on departmental design are compared in the statement at pp 7-11 cf. The statement at p. 13 cf shows the amount and percentage of excess based on departmental design and for alternative rate for abutment and piers and for alternative designs submitted by the Contractors.

para 5 p 3 cr

6 The S.E (H) has also consulted M/s. the Barathi Engineering Construction Co. Udipi. The Cost reported by them namely Rs. 5.5 lakhs for the work ~~on this basis~~ is reported by the S.E. to be 70.4% above the estimate rate

'K' in p 3 cr

7 The S.E. Considers that in view of the difficulty to get skilled workmen in the locality and the use of precast slab will save a lot of form work and also facilitate the early Completion of the work. In the circumstances he Considers that the tender of Messrs. P. Ramaswamy & Co. Coimbatore and their design using precast Cement Concrete blocks all round ~~work~~ with mass Concrete 1:4:8 in the Centre instead of Coursed rubble masonry for the piers and abutments may be accepted. The C.E (H) has recommended this proposal for this

para 10 p. 3 cr

para 11 p. 3 cr

C E's letter p 1 cr

8 The following are the tender rates for certain major bridge works which were taken up for execution :—

1. Bharathapuzha bridge in N. Malabar (Estd. Cost - Rs 11.35 lakhs) — 44 % over estimate rates

2. Payaswami bridge in S. Kanara Dt - (Estd. Cost - Rs. 10.1 lakhs) — 38.5 % over estimate rates

3. Pugalur bridge over the Cauvery in Trichy Dt (Estimated Cost - Rs. 26 lakhs) — 33 % — do

4. Pennar bridge at Nellore (Estd. Cost Rs. 23 lakhs)
   lowest tender of M/s. Rayalaseema Construction Agency (not recommended by CE) — 20 % do
   Tender of Messrs. Gannon Dunkerley & Co. recommended by CE. but not accepted by Govt. (Work done departmentally) — 38.4 % do

5. Anaikatanahalam bridge
   Tender of M/S. Gannon Dunkerley & Co. recommended by CE. but not accepted by Govt. — 47 % do

6. Bridge over the Gurpur river near Kulur in S. Kanara Dt.
   Tender of M/S Gannon Dunkerley & Co. Ltd. — 55.36 % do
   (Departmental execution was not considered feasible.)

In the present case, the negotiated tender of M/s P. Ramaswami & Co. as recommended by the C.E. works out to - 44.91 % above the estimate rate. It is for Consideration whether the recommendation of the C.E.

5 Ec

may be accepted. Fin. may see for remarks.

29.12.50 Dy. 30/12/50 | The CE's recommendation may be accepted

31/12/50

2/1/51 Fin

ASSISTANT SECRETARY TO GOVERNMENT FINANCE DEPARTMENT 4 JAN 1950 5860

PWD No. M. 6026 B/641

2.1.51

Finance(Exp.C.)Dept.

The file deals with the question of acceptance of tender for the work of constructing a bridge over the Swarnandhi near Puttige in S.Kanara District, which was sanctioned at an estimated cost of Rs.4 lakhs in G.O.No.1510 P.W. dated 28-4-49. Tenders were invited for the work three times. The tenders received on the first two occasions were rejected, as the rates quoted were high and unacceptable. Three tenders were received in response to the third call. The amount of tender and the percentage excess over the estimate rates in each case are mentioned on p.1 above. The lowest tender is that of M/S.P.Ramaswamy &Co., Coimbatore. This tender is 52.48% above estimate rates. The contractors have also quoted alternate rates for piers and abutments (1) using mass concrete 1 : 4 : 8 and 1½" I.R.C. metal and (2) using precast cement concrete blocks of 1' - 0" x 2' - 0" all round and mass concrete 1:4:8 in the centre instead of coursed rubble masonry. On negotiation, they have reduced their rates for certain items in the schedule

The percentage excess over the estimate based on the departmental design and the two alternate designs is shown below:-

	% Excess As per original tender.	%Excess as per reduced rates.
(i) ~~For~~ Departmental design	52.48%	50.22%
(ii)Using mass concrete for piers and abutment	48,98%	46.72%
(iii)Using concrete with precast block facing	47.76%	44.91%

2. The S.E. has stated that it is very difficult to get skilled workmen in the locality and that using of precast slabs all round will also save lot of form work and that, if this is adopted, the bridge work may be completed earlier than the scheduled time. He has accordingly recommended the tender of ~~the~~ M/S P.Ramaswamy & Co. for design (iii) referred to in para.1 above. The excess over the estimate (Rs.3,22,845) for this design works out to Rs.1,44,980 and is 44.91% above estimate rates. The C.E.(H) has recommended the proposal. The P.W.D. have furnished on p.4 above a statement of the percentage excess over estimate rates in the case of certain major bridge works taken up for execution. They support the C.E.(H)'s recommendation. Finance may agree to the proposal. (It may be noted that the percentage excess in the case of the bridge over the Gurpur river in the S.Kanara District was 55.36% as against 44.91% in the present case.)

3. H.M.(Finance) may see.

9.1.51 9/1/51 : (In the case of a similar bridge work in the same district (South Kanara), the C.E. stated that the deptt. does not possess the necessary equipment & departmental execution is not feasible.)

10/1/51 $

11/1/51 P.W.

Yr no.8400 Exp.C 11.1.51

The file deals with the tender proposals for the work of constructing a bridge over the Swarnanadhi near Puttige in S. Kanara District sanctioned in G.O. No.1510 P.W. d/ 28-4-49 at the estimated cost of Rs.4 lakhs. The proposals are examined in this Department notes at pp.1-5 ante and the Finance Department notes at pp.5-6 ante. The lowest of the tenders received was from M/s. P. Ramaswami & Co., Coimbatore. It is 52.48% above the estimated rates. The S.E(H) Coimbatore negotiated with the contractor and got the tendered rates for certain items reduced. The contractors have also quoted alternative rates for piers and abutments (i) using mass concrete 1 : 4 :8 and 1½" I.R.C. metal and (ii) using precast cement concrete blocks of 1" 0" x 2" 0" all round and mass concrete 1 : 4 :8 in the centre instead of coursed rubble masonry provided in the estimate:

The percentage excess over the estimate based the departmental design and the two alternate desig is shown below:-

	% Excess as per original tender	%Excess per redu rates.
(i) Departmental design ...	52.48%	50.22%
(ii) Using mass concrete for piers and abut-ment ...	48.98%	46.72%
(iii) Using concrete with precast block facing ...	47.76%	44.91%

2.The S.E. has stated that it is very difficult to get skilled workmen in the locality and that using of precast slabs all round will also save lot of form work and that if this is adopted, the bridge work may be completed earlier than the scheduled time. He has accordingly recommended the tender of M/s.P.Ramaswamy & Co. for design (iii) referred to in para.1 above. The excess over the estimate (Rs.3,22,845) for this design works out to Rs.1,44,980 and is 44.91% above estimate rates. The C.E(H) has recommended the proposal. This Deppt. consider that the C.E recommendation may be accepted. Finance agree.

8 CE

6026-A/50

The case may be circulated to H.Ms. (P.W) and (Finance) for approv-l of the C.E's recommendation to approve the negotiated tender.of M/s. P. Ramaswami & Co. at 44.91% above estimate rates using precast cement concrete blocks all round with mass concrete in the centre.for piers and abutments. | X

13.1.51 16/1/51

The typed note on pp 7-8 ante may be perused. 'X' above is for approval. Ordrs of HM(PW) and HM(Fin) may be taken.

16/1/51

In the circumstances stated by the CE(H) and agreed which are set out in para 2 above, the proposal at 'X' above may be accepted.

NSR 17/1/51

17/1/51

Hon (PW.) 18.1

Hon (Fin) 18.1

A draft order is submitted. Fin. may see.

22/1/51 23/1/51.

23/1/51

NSR 23/1/51

Fin Exp. C.

(Previous fin note on Pp 5-6. above)

Please see the orders in circulation above.

The draft order below may be accepted.

31/1/51

P.W.

PWD no. 6026/A/50-2

3-1-51

ADDL. ASST. SECRETARY TO GOVT. 2-FEB1951 586 PUBLIC WORKS

Fin no 6647 Exp C

1.2.51

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Adj
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Bot MMSC64 [Solved as Cr. Cases Nos. 486 PW dt 3.2.5[illegible]]